

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Boyes et al.
Serial No.: Unknown
Filed: Herewith
Priority: Divisional application of 09/686,252 filed 10/11/2000
Group Art Unit: Unknown
Examiner: Unknown
Title: METHOD TO CREATE A HOT MELT FORM FOR USE WITH
AN AIR INDUCTION ASSEMBLY

PRELIMINARY AMENDMENT

Assistant Commissioner of Patents
Washington, D.C. 20231

Sir:

AMENDMENT

IN THE CLAIMS

Please delete claims 1-18 and add new claims 19-33.

19. (NEW) A method for forming an elastomeric seal for use with an air induction assembly comprising the steps of:
melting a thermal mastic elastomeric material to a liquid form;
applying said liquid form to a surface of said air induction assembly to create said elastomeric seal.

20. (NEW) The method as recited in claim 19 further comprising the step of blending a gas into said liquid to form a foamed composition.

21. (NEW) The method as recited in claim 20 wherein said gas is nitrogen.

22. (NEW) The method as recited in claim 19 wherein said surface of said air induction assembly is a neck of a lower shell of said air induction assembly.
23. (NEW) The method as recited in claim 22 wherein said elastomeric seal is positioned between said neck having an inner diameter and a mass air flow sensor having an outer diameter, said inner diameter being greater than said outer diameter.
24. (NEW) The method as recited in claim 22 wherein the steps of applying said liquid form includes positioning a mold around an interior surface and an exterior surface of said neck, dispensing said liquid form into said mold, and removing said liquid form from said mold with said neck attached.
25. (NEW) The method as recited in claim 24 further comprising the step of inserting a mass air flow sensor into said neck of said lower shell, said elastomeric seal securing said mass air flow sensor to said neck.
26. (NEW) The method as recited in claim 22 further comprising the step of inserting a mass air flow sensor having an outer diameter into said neck of said lower shell having an inner diameter, said inner diameter being greater than said outer diameter, and the step of applying said liquid form includes dispensing said liquid form through an aperture in said neck and between said neck and said mass air flow sensor, said elastomeric seal securing said mass air flow sensor in said neck.

27. A method for forming an elastomeric seal for use with an air induction assembly comprising the steps of:
- melting a thermal mastic elastomeric material to a liquid form;
 - positioning a mold around an interior surface and an exterior surface of said neck;
 - dispensing said liquid form into said mold to create said elastomeric seal;
 - removing said elastomeric seal from said mold with said neck attached; and
 - inserting a mass air flow sensor into said neck of said lower shell, said elastomeric seal securing said mass air flow sensor in said neck.
28. (NEW) The method as recited in claim 27 further comprising the step of blending a gas into said liquid form to form a foamed composition.
29. (NEW) The method as recited in claim 28 wherein said gas is nitrogen.
30. (NEW) The method as recited in claim 27 wherein said elastomeric seal is positioned between said neck having an inner diameter and a mass air flow sensor having an outer diameter, said inner diameter being greater than said outer diameter.

31. A method for forming an elastomeric seal for use with an air induction assembly comprising the steps of:

melting a thermal mastic elastomeric material to a liquid form;

inserting a mass air flow sensor having an outer diameter into said neck of said lower shell having an inner diameter, said inner diameter being greater than said outer diameter; and

dispensing said liquid form through an aperture in said neck and between said neck and said mass air flow sensor to create said elastomeric seal, said elastomeric seal securing said mass air flow sensor to said neck.

32. (NEW) The method as recited in claim 31 further comprising the step of blending a gas into said liquid form to form a foamed composition.

33. (NEW) The method as recited in claim 32 wherein said gas is nitrogen.

IN THE SPECIFICATION

After the title of the invention, please add the following sentence:

This application is a divisional application of serial number 09/686,252 filed October 11, 2000.

On page 3, please replace the paragraph on line 18 with the following:

Figure 3b illustrates a side view of a mold utilized to shape a hot melt form.

On page 4, please replace the paragraph on lines 13-20 with the following:

After being thoroughly mixed, the foamed material 30 is fed through material lines 22 to a dual nozzle dispensing gun 24 attached to a robot. The robot and the gun 24 apply a layer of non-foamed base material 26 to the surface of a lower shell 28, as shown in Fig. 2. The base material 26 is a thermal mastic blend and acts as a bonding agent, attaching a foamed material 30 to the lower shell 28. Nitrogen gas is not mixed with the base material 26 as the nitrogen gas will cause shrinkage (about 17%) during curing. After the application of the base material 26 to the surface of the lower shell 28, the foamed material 30 is applied by the gun 24 directly over the base material 26.

REMARKS

By this amendment, claims 1-18 have been deleted and new claims 19-33 have been added. No additional fees are seen to be required. However, the Commissioner is authorized to charge Deposit Account No. 50-1482, in the name of Carlson, Gaskey & Olds, P.C., for any additional fees.

Respectfully submitted,

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VERSION WITH MARKINGS SHOWING CHANGES

IN THE SPECIFICATION

On page 3, please replace the paragraph on line 18 with the following:

Figure 3b [3a] illustrates a side view of a mold utilized to shape a hot melt form.

On page 4, please replace the paragraph on lines 13-20 with the following:

After being thoroughly mixed, the foamed material 30 is fed through material lines 22 to a dual nozzle dispensing gun 24 attached to a robot. The robot and the gun 24 apply a layer of non-foamed base material 26 to the surface of a lower shell 28, as shown in Fig. 2. The base material 26 is a thermal mastic blend and acts as a bonding agent, attaching a foamed material 30 to the lower shell 28. Nitrogen gas is not mixed with the base material 26 as the nitrogen gas will cause shrinkage (about 17%) during curing. After the application of the base material 26 to the surface of the lower shell 28, the foamed material 30 is applied by the gun 24 directly over the base material 26.